

T News Letter **TDARS**

G3ZME
G6ZME

TELFORD AND DISTRICT AMATEUR RADIO SOCIETY

www.TDARS.org.uk

FOUNDED 1969

www.TelfordHamfest.co.uk

Issue 292

Jan./Feb. 2020

www.TDARS.org.uk

Programme

www.telfordhamfest.org.uk

- January 22 10 Minute Topics - or even just 2 minutes - by Members
- January 29 Bowls Evening with the LWWH Bowls Club, main hall. 7:30 pm.
Foundation Exam in meeting room. No access from 17:30 until completed. Quiet please.
- February 5 Committee Meeting. GX3ZME / GX6ZME? See page 3
- February 12 Out and About 2020. What, Where and When for portable operations
- February 19 Guest Speaker—Matt Porter G8XYJ—The 6cm (~5700MHz) Band
- February 26 Under—a—Fiver Construction competition. Projects costing < £5
- March 4 Committee Meeting GX3ZME / GX6ZME? See page 3
- March 11 Main Construction Competition. Bring along and share your project with Members.
- March 18 Memories of a fading RSGB Regional Rep. ! (G3UKV)
- March 21 (Saturday) “Train the Trainers” at Hortonwood venue. Sign-up with Graham
Address: Iconsys, Technology House, Hortonwood 33, Telford TF1 7E
- March 25 Annual General Meeting—8 pm. Subs Due !!
- NOTE: April fixtures may be swapped around—see next Newsletter or Website***
- April 1 Committee Meeting
- April 8 Planning Permission and Antennas. [Speakers invited/welcome]
- April 15 The Nano VNA (Vector Network Analyser). Cheap but vg VFM !
- April 22 RF Interference Identification and Possible Remedies
- April 24-26 Int. Marconi Day/Weekend. GB8MD, Tywyn, Gwynedd. M/C M0JZH
- April 29 Something Old (and or) Peculiar. What have you got that fits ?

For Amateur Radio Exam Training & Exam entries—Graham G7LMF

For Morse Training and Morse Proficiency Tests Martyn G3UKV or Eric M0KZB.

For Equipment Loans & Returns contact Don M0TBQ.

Editorial

How many members have wondered if they can get away with their latest dream antenna or mast/tower without the neighbours noticing or complaining ? And if they do, will they formally complain to the local authority (who are obliged to follow-up any such complaint) ? Do we leave our mast at full height all the time, or is it diplomatic (but a nuisance) to lower it when not in use ? What exactly is the maximum height we can put up an antenna without permission—is it up to 3m or is it the roof line ? Can we get away with a 2m or 70cm antenna that neighbours will assume is a TV aerial ? Or even a modest dish for Es Hail geostationary satellite ?

As noted in the Programme, we are airing this thorny theme in April—probably the 8th—but subject to possible necessary programme date adjustments. (as noted page 1).

MIV

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Two shots of the TDARS Anniversary mugs— Have you got your's yet ?

**Still available from Paul M0PLA for
just a fiver each :
(actually slightly less than they cost to
be made for us !)
When they're gone, they're gone**



Most members (30+) have now migrated to the internet **TDARS Reflector "Groups.io"** from Yahoo. If you already subscribe to any group in 'groups.io', it only requires searching and adding TDARS to your existing group(s), but if you're new to **groups.io** you will need to first become a subscriber (<https://groups.io/register>) which just requires your e-mail address and a password. No ads or hassle. Then search for 'tdars' and request to join. There will be a delay for the owner to approve membership of this 'private' group, but if all OK, you will get a confirmation of membership. It's very useful for circulating TDARS info and updates etc.

TELFORD & DISTRICT AMATEUR RADIO SOCIETY : 2019-20

CHAIRMAN: Simon Bird G0UFE (01952 401018)

VICE-CHAIRMAN: Martyn Vincent G3UKV (01952 255416)

SECRETARY: John Humphreys M0JZH (07824 737716)

TREASURER: Paul Athersmith M0PLA (07966 969230)

CURATOR : Don Nicholls M0TBQ (01952 411680)



NEWSLETTER EDITOR: Martyn Vincent G3UKV (01952 255416 or 07421 001166)

PUBLICITY/WEBMASTER: Dave GOCER (01630 638699 or 07971 416940)

Committee: Brian G6UDX; Graham G7LMF; Ian M0IRP; Village Hall Committee Liaison officer Martin 2E0TRO.
QSL Manager Paul M0PNN; Assist Curator: Chris 2E0EOH; Trophies/Certs: Martyn G3UKV.

Qtc: News & Information



TDARS MEETINGS EVERY WEDNESDAY AT LITTLE WENLOCK VILLAGE HALL UNLESS INDICATED OTHERWISE ON THE FRONT PAGE PROGRAMME. ROOM BOOKED FROM 7PM - 10PM. MEETINGS USUALLY COMMENCE AT 8PM

Please note: A current membership card may be required to borrow TDARS equipment. Please return borrowed equipment promptly .

The **TDARS 50th Anniversary Meal** at Holiday Inn took place in November. and was very successful, with 32 present. It was particularly pleasing to see a couple of founder members present—Dave GM3YEW and Dave G8VZT. Simon 'UFE welcomed everybody, and also paid tribute to the founder members, including the Silent Keys who could not be with us. Robin, G1MHU, came down especially from Wakefield to enjoy the festivities. The company and food was excellent, as was the service. If you missed it this time, perhaps we'll have another chance in 2044? (75th year).



On the topic of food, our thanks to **Simon G0UFE** who organised the regular Christmas lunch at the Grazing Cow in Lawley and to **Paul M0PLA** who prepared refreshments at the club in October and December. All events were enjoyed by those present.

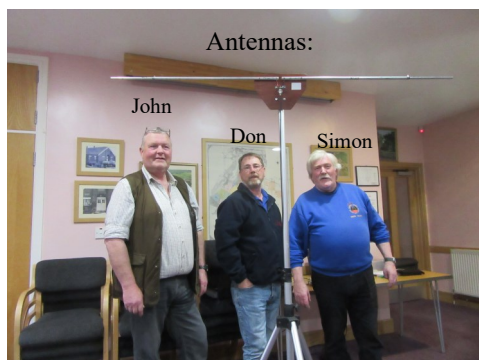
As mentioned last time, Mike G3JKX has retired from his outstanding volunteer work in preparing hundreds of **RA exam candidates for Foundation, Intermediate and Full exam Licences** over many years. Thankfully, Graham G7LMF has taken on the task of being tdars 'exam secretary' in place of Mike, and two weekend training courses have been organised in January for about 7 'F' candidates, which will be led (for the final time !) by Mike 'JKX'. Many would-be future trainers hope to be present to learn from 'The Master'. A formal RSGB "Train the Trainers" takes place on Sat. 21 March—contact Graham G7LMF or the RSGB direct <https://rsgb.org/main/clubs-training/for-trainers/train-trainers-events/> for Registration and more information. In the longer term, it is hoped that many TDARS members will assist by offering to support the training programme, particularly at Foundation and Intermediate levels. The 'Full' level training is often undertaken by candidates themselves, possibly using the Distance Learning resources available on-line by groups such as those provided by Bath or Essex Ham radio clubs, as well as the RSGB book.



telfordhams

For many years, **GX3ZME was activated on the First Wednesday of The Month** from the club on HF and VHF. The idea was to keep the callsign active and to make available our club facilities to members. Unfortunately HF, followed more recently by VHF, have suffered badly from very high levels of noise at the LWVH premises. Only GB3TF is still really useable from the club QTH. **Is there a club member** who would like to regularly activate the club callsign from their home station, or even Portable ? If so, please let Martyn (G3UKV) know ASAP, so that **GX3ZME** (or GX3ZME/P) can be heard once more most months. Alternatively **GX6ZME** could be activated—in which case speak to John M0JZH (licence holder).

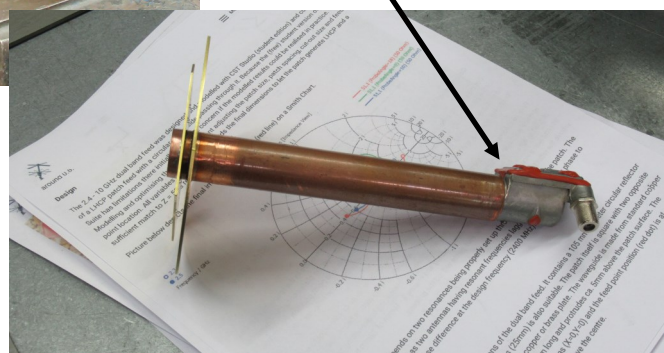
Ron Cappleman, aged 91, M0EAK of Lilleshall sadly passed away on 17th October last. Ron had been unwell for a number of years, but was a keen listener and operator for many years previously. The funeral took place on the 15th November at the Woodland Burial ground in Newport, attended by his wife June (married for 66 years), as well as his daughter Abi and son Tim 2E0BAJ. A couple of TDARS members were also present.



Various Winter Projects were outlined at the meeting late in November. Various antennas, filter kits, power supplies, Es Hail Satellite components and more. Many have come to fruition, others have not been seen . . .



←<Soldering up an Oscar-100 POTY ('Patch of the Year') twin antenna (2.4 and 10.3 GHz) at QTH G8AQA/M0HMO in December. And below—the finished product with LNB attached:-



Microwave and ATV round-table at Eaton Manor : Sat 14 December

M0HMO, G7ACD, ???, G8VZT, M0YDH



Some of the items used as background in the "Cabinet of Secret Lives" due soon to be featured in a film at Theatre Severn in Shrewsbury until April. Items provided by Brian G6UDX, Dave G0CER, Martyn G3UKV and Dave G8VZT. Can you identify each item ?



The Software category winner was Heather Lomond, M0HMO, for her Software DATV Receiver. [photo provided by G6DFD]

Paul M0PNN has now had two QSOs on 2 metres to the Cape Verde Islands (D41CV) : 4K+ Km Log entry:-
D41CV 01/01/2020 2007 - 2009 144.176 FT8 25 -15 -17 HK76 FT8 Sent: -15 Rcvd: -17 As
 Paul said: "Good start to the new year !" Some other club members enjoyed the openings. The VHF bands were wide open over the Christmas period, and for a couple of days into January. A new tropo DX record between Scotland and the Cape Verde Is. was set on 2m.

Mike G3JKX has provided details of his forthcoming activity from the Atlantic whilst on holiday in the Funchal area of Madeira Island. "Hopefully I will get OTA as CT3/G3JKX in the evenings/early mornings from Monday evening 17th Feb until Sunday 23rd, but no guarantees. As for days / times and frequencies I will send TDARS emails." Mike suggested 40 metres. Rig: Elecraft K2. Madeira clock time is same as UK—GMT. [Beautiful island ! -Ed]



Thanks for Newsletter input this time:

**Paul M0PLA, Graham G7LMF, Paul G8AQA, Simon MW0NWM,
 Peter G4URT, Mike G6DFD, Paul M0PNN, Mike G3JKX**

Next edition March/April 2020

Please keep it coming—contributors make the difference!

.... From Peter G4URT: (sent 23 December)

“ Seeing as how I'd paid my TDARS subs thought I'd better join this group and introduce myself.

Now living in Wem since move from a rare square (JO00du) this year to escape the crowds, building developments and rapidly increasing RF noise floor....

Currently QRT until tower goes up (PP obtained) and 2m array is re-built and installed. Only 'do' 2m JT65 modes - primarily JT65b on EME with the occasional foray onto MSK441 MS mode. I do have a microphone but its whereabouts at the moment is 'lost presumably missing'. Same applies to my morse key which has been missing since 1984 when I fooled the Post Office testing station to pass me at 12 wpm!

So, if next year (ie 2020—Ed) you hear this horrendous digital signal at around 144.120 from the Wem direction it is me trying to complete 2m DXCC. And for that I apologise in advance. Think I have about 90 countries at the moment but the paperwork is somewhat out of date and the QSL cards have stopped coming through the letter-box.

Wishing all a good Xmas and an aggro-free New Year “

....and Dave GOCER responded 20 minutes later:

Welcome Peter

I think Wern is quiet RF-wise so good luck with your new QTH. I'm across a little at Tern Hill and you're more likely to hear me on 6metres, some MS (MSK144/FSK441).

I've not worked your old JO00du square but have worked G4RUL on contest evenings in JO00dr and also a French station in JO00 as well. 73 Dave G0CER

.... resulting in:

Dave,

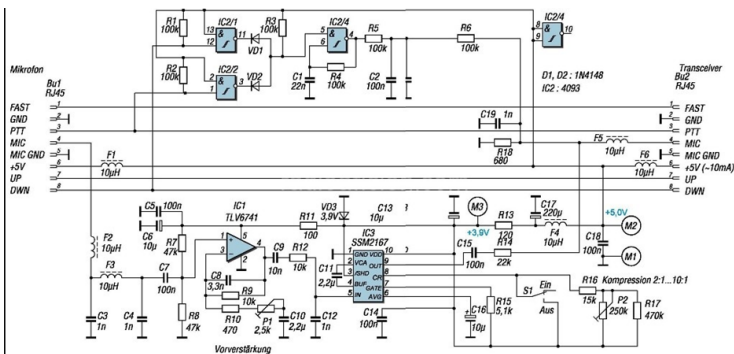
G4RUL (AI) and me go back over 45 years! We used to do 2m contests together using club sign G1KAR/P until we had a major falling out with the club. - no names, no pack drill unless you look it up. We wanted to do contests properly.... He does very well, bearing in mind he is an 'old school' contester. Works from his car, no helper, no computer, no check sheet, no rotator (arm out window), no KST, no MGM....and he still does very well in UKAC (looking at 4th in AR this year).

Never been on 6m - I dread to think of elevating a large antenna capable of EME on that frequency !!!

Peter



.... From Paul M0PLA: (sent 7 January)



“Over the Christmas period a few SOTA operators have been trying to carry out a few tests on a piece of equipment that is German made and also available in the UK via Sotabeams.”



“ This is the DYC-817 a Speech Compressor for the Yaesu FT-817, FT-857, FT-900, FT-897 & FT-450. I had one purchased for me by Michelle for our wedding anniversary.

I went out this weekend just gone 4th/5th January and tested the Compressor during my second summit of the day. I was on one of the summits near the Horseshoe Pass in Wales. I managed to find Gerald GM4OIG/P on a Hema summit in Scotland on 60m 5.3985 Mhz SSB, a favourite for most SOTA operators that use 60m. I informed him that I had the Compressor and he said that he also had one, but had not taken it with him on this summit.

I started the QSO without the compressor turned on and he gave me a 5/8, I then turned the compressor on and he said the display didn't change as I didn't expect it to, as it is for speech but he said he would have given me a 5/9+ as that is how much improved that it sounded.

I then changed bands and started calling CQ SOTA and as you can see from my log I was very happy. The first time in about 12 months that I have managed to get to the USA and many other stations. Was this down to the compressor or not ? I can't say but I was very happy. "

Club Members and locals worked from these SOTA sites include: Simon G0UFE, Sean G0OOQ, Brian G0HCT, Mike G6DFD, Don M0TBQ and Matt 2E0MDJ.

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.... From Graham G7LMF: (Sent 10th January)

A little confession from G7LMF

I am a sloth !!!!



Since 11th September 2016 I've been SOTA chasing,
**SOTA chasing is one of the fastest growing specialist interests
in amateur radio today.**

Unlike the activators (Paul M0PLA etc.) who climb mountains and make QSO's, as a SOTA chaser, I don't need any specialist equipment or fitness and my existing radio equipment allowed me to start earning points.

As Telford is close to mountains, I have had considerable success on 2m FM with my colinear. However, SOTA is international and I have had contacts with activators throughout 17 European countries with access to the HF bands.

The number of points gained for a contact depends on the height of the summit and each summit has a reference number. Activators issue alerts on SOTAwatch to let you know the times and frequency when a summit is due to be activated.

So, why am I a sloth?

Shack Sloth and Mountain Goat:

At 1,000 points 'Activators' achieve "Mountain Goat" status and Chasers/SWLs are "Shack Sloths".

I've already mentioned Paul M0PLA earlier in this article and I will publicly thank him here because of all the 343 contacts I have made to reach 1000 points on 27th December 2019, Paul has been my most prolific activator with 35 QSO's in 4 countries.

As achieving "Shack Sloth" status took me a lot of time I decided to pay for one of the trophies to mark this significant milestone.

[Many congratulations Graham—I had no idea you had become a ‘Shack Sloth’ with 1000 points.]



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WANTED: Most TDARS Members have transceivers that operate on HF and/or VHF, but we don't seem that good at communicating with each other. For many years a small group of Retirees have met each MONDAY and FRIDAY on (or near) 3657KHz (80m) from about 08:45 local time. Likewise, a small group meet up most SUNDAY evenings at about 21:00 local time on 144.600MHz FM. Attendance has been in decline for many years. Several ops. have a brief daily meeting on their way to/from work, any time after 08:15 or 16:30, often on 145.550 MHz /mobile.

Can any one suggest alternatives or additions to these 'nets' which might increase our ability to communicate better with one another ? Replies to the TDARS Reflector on groups.io please ! - **Martyn G3UKV**

.... And from Paul G8AQA (sent 11 January)

I have the panadaptor (P3) working with the K3 Transceiver. I also have the power monitor so I can see the modulation envelope on transmit and monitor the output power and SWR.

I have put up the combined 4m/6m antenna on the tower. The SWR of the 6m section is about 1.8:1 at the moment so I will have to adjust the gamma match. It takes a lot of effort to lower the tower and to luff it over as there are guys attached at 3 levels, but it does however mean that I can leave the tower up in all weathers. I don't like the gamma match but they are on the 4m and 6m driven elements. It is interesting that stacking distances for 'Yagis' for antennas on different bands can be very small and in the case of this antenna it is zero. (Apologies to those who prefer the English 'aerial').

A great addition to a Bird 43 power meter is the peak internal attachment [one of the club's Bird meters is a peak reading instrument – Ed]. This is easy to calibrate on a steady signal as it should read the same with it switched in or out. On SSB it is surprising how much higher the peak is compared with the normal reading. This should help reduce the possibility of overdriving the rig and causing other people problems. The boards that fit inside are available from a number of firms and the mod is easy involving no soldering. The only problem is remembering to turn off the battery as where mine is currently situated I can't see the LED. The on/off switch and power on LED are mounted instead of the storage for one of the spare lugs. I bought the Bird version from Henry Radio in the states. It was fairly expensive though.

We have had a few sessions building up surface mount stuff including an Anglian transverter for 2m and an Icen for 70cm. I need to get these aligned and tested and then make the PA's needed to follow them. Also the 70cm preamp needs to have its packaging finished so it can go on the tower.

The "POTY (Patch of The Year) training session" subsequent to the Midlands Round Table has taken place, in my workshop, with three constructed. These are the dual band feeds for the dishes used for the QO-100 geostationary repeater in the sky. A conventional TV LNB for the downlink is fitted onto some 22mm copper pipe with the plates of the patch antenna mounted on the outside for the 2.4GHz uplink. Another session is being planned for another 3 people. Each LNB seems to be different so there's no standard way of attachment.



Heather has just been testing a non phase-locked LNB to see if it can be locked to the satellite beacon using "SDR Console" software, but I don't think this is very successful for SSB reception. The internally phase locked crystal type of LNB was pretty good for stability and would not seem to need an external locking signal.

We have a long list of stuff planned for both the home station and for portable operation. We want to build another 24GHz portable rig for contesting and probably have most of the bits which can be built up/modified. Unfortunately, most of the test gear stops at around 20GHz. I do however have a little beacon made by Dave 'VZT which should help with receiver alignment. We are collecting bits for 47 and 76GHz but are not taking the easy route of buying off-the-shelf transverters. If anyone has any bits of very small waveguide surplus we would be interested. We have resisted the temptation to get involved with the 122GHz chips from Australia as this would be another project too many.

EME is still on the 'to do' list, but needs time and a transverter for 10GHz. I am not a fan of the digital modes and want to fulfil a childhood ambition of voice contact.

[illegible]

From Graham G7LMF : "I've updated the training materials from Essex Ham for the new syllabus Foundation course which we will start running this Saturday" (18th and also 25th January 2020) - Ed.)

See [tdars.groups.io files area](https://tdars.groups.io/files/area) for downloads listed below.

“Feel free to have a look and if you want to get involved in training then please let me know.”

/Training Resources - Foundation 2019/.01 Welcome To Amateur Radio Foundation HamTrain v2.0.01.ppsx

/Training Resources - Foundation 2019/.02 Technical Basics Foundation HamTrain v2.0.01.ppsx

/Training Resources - Foundation 2019/.03 Transmitters Receivers Foundation HamTrain v2.0.01.ppsx

And the complete Foundation syllabus can be found here: (18 pages long!)

https://rsgb.services/public/exams/specifications/2019-10-30_foundation_syllabus_2019_specification.pdf



A M
Amateur Radio
Europe

by Simon MW0NWM

**AM AMATEUR RADIO EUROPE – FACEBOOK GROUP
PRESS RELEASE**

AM Amateur Radio Europe is a growing Facebook community of European radio amateurs.

Plus any other ideas on how to promote the use of this fantastic mode.

The group can be found at the link below and any amateur or short wave listener is welcome to join.

<https://www.facebook.com/groups/656582541370211/>

AM OSO PARTY 2020

When? Saturday 25th January 2020 - 06:00 UTC until Sunday 26th January - 12:00 UTC.

To promote / encourage the use of AM on the 160, 80, 40, 20, 15, 12 and 10 metre amateur bands.
This is not a 5/9 contest and aim to encourage QSOs and conversation, however points can be gained and certificates awarded.

There will be points to be gained for each QSO and for each new DXCC worked and there are power categories you can enter to suit all levels of the UK licence. However whilst there are points up for grabs and also certificates to win, the main aim is to get people having conversations using the original voice mode!

So fire up those vintage rigs, build that homebrew transmitter or even use your modern equipment and experience the joy of operating AM.

Full details of the AM QSO Party can be found at the following website:

<https://amqsoparty.wixsite.com/mysite?fbclid=IwAR0bmxpQqQa9-QVoNMM7HdIBcqqcAfDJR4FO935RKGOVZZn6gnNtCVDOnxg>

or email am.qso.party@gmx.co.uk

Simon Taylor

MWONWM

Founder of AM Amateur Radio Europe

[illegible]

Forwarded by Paul G8AQA from on-line Newsletter 'Zero Beat' by W8LKY regarding elbow connectors.

"Below are three pictures of an off brand elbow connector, I am sure we almost all have some elbows in our possession. This one was recovered off of a 30W UHF continuous duty transmitter operating in the 450 MHz band. When the operator went to disconnect the cable this connector actually got so hot it burned his hand slightly. If you observe the spring you can see it's been very hot as indicated by its bluish tint. This is not how you do an RF connector! Besides the spring introducing a lumped inductance into the transmission line. It's not a very good conductor of RF either. There's a reason these connectors are a buck or two and Amphenol might get five times that. Ever wonder why the finals on your rig mysteriously failed? Or, that repeater doesn't work worth a darn anymore? This just might be your culprit! Be very careful when you buy some of the cheap stuff. Your good deal on a cheap connector might just cost you a lot of money in the long run. As my mother used to say, don't touch that, you don't know where it's been ! " [Author: Paul K8IO]

